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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/816,602	03/23/2001	Mark Lynn Jenson	1327.010US1	6174
7590 12/15/2004 LEMAIRE PATENT LAW FIRM, PLLC P.O. BOX 11358 ST. PAUL, MN 55111			EXAMINER CREPEAU, JONATHAN	
			ART UNIT 1746	PAPER NUMBER
DATE MAILED: 12/15/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/816,602

Applicant(s)

JENSON ET AL.

Examiner

Jonathan S. Crepeau

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 and 54-95 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 12-27, 59, 60, 71, 78-92, 94 and 95 is/are allowed.
- 6) ☒ Claim(s) 54-58 is/are rejected.
- 7) ☒ Claim(s) 11, 28, 29, 61-70, 72-77 and 93 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/30/04, 6/13/03, 4/11/03, 3/23/01</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 30, 2004 has been entered.

This action addresses claims 1-29, 54-83, and newly added claims 84-95. All of these claims have been examined on the merits herein. This action is non-final.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 59-63 and 90-95 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 59 and 90-95, the word "means" is preceded by the word(s) "thin-film battery" in an attempt to use a "means" clause to recite a claim element as a means for

performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967). As such, this raises a §112 second paragraph issue.

Additionally, the term "first enclosure portion means for enclosing the device" in claim 59 is not considered to invoke 35 USC §112, sixth paragraph. The claim subsequently recites that "the first enclosure portion means [is] shaped to form a convex outer surface case of the device." This is believed to introduce too much structure into the recitation, by specifying that the means is a convex case. As such, the recitation is not considered to invoke 112, sixth paragraph. See MPEP §2181.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 78-80 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 78 recites that the battery is integral with a shell that forms at least one portion of a wristwatch enclosure. However, the specification does not appear to provide adequate

support for this subject matter. The wristwatch embodiment is described at paragraphs [0322] and [0323]. The disclosure states that “[w]ithin the case 3210 is a solar cell 3220 and an LCD 3222. The solar cell 3220 is attached to the battery or series of battery cells 1110.” However, this is not believed to support the recitation that the battery is integral with the case (enclosure), as recited in claim 78. As such, this subject matter is considered to constitute new matter.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-10, 12-27, 59, 60, 84-92, 94, and 95 are rejected under 35 U.S.C. 102(b) as being anticipated by Lew et al (U.S. Patent 5,644,207). The reference is directed to an integrated power source having solar cells laminated onto a solid-state polymer battery (see abstract). The power source is integral to the enclosure of a variety of electrically-powered devices, such as houses, automobiles, phones, laptops, etc (see the Figures of Lew). Some of the enclosures (roofs of houses, automobiles, laptops), have a convex outer shape and a concave inner shape (see Figs. 4B, 5, 7B, 12, and 13). The “first shell” of the claims may be considered to be either layer 112 or 116 in Figure 12, whereby the battery layer is either disposed on the interior or

exterior of the "first shell." Traces are formed on layer 116 for connection to an electrically powered device (see col. 4, lines 24 and 44). A protective layer (34) may be placed over the battery. As shown in Figure 5 and disclosed in column 5, line 45, the battery may comprise the entire housing of a laptop computer, which has two halves and a hinge.

Thus, the instant claims are anticipated.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 71 and 81-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lew et al.

The reference is applied to claims 1-10, 12-27, 59, 60, 84-92, 94, and 95 for the reasons stated above. However, the reference does not expressly teach that the battery comprises a lithium phosphorous oxynitride (LiPON) electrolyte or intercalation anodes and cathodes, as recited in claims 71 and 82, or that the battery comprises conductive layers adjacent the electrodes, as recited in claim 81.

However, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because the artisan would be motivated to incorporate these features into the battery of Lew. LiPON electrolytes are known for use in thin-film solid state batteries and are well-adapted for such a use. Additionally, an artisan would be motivated to include conductive layers to function as current collectors to efficiently collect current generated by the battery. As such, these limitations are not considered to distinguish over the reference.

Allowable Subject Matter

10. Claims 54-58 are allowed.
11. Claims 78-80 are rejected under 35 USC §112, first paragraph but contain allowable subject matter as currently drafted.
12. Claims 11, 28, 29, 61-70, 72-77, and 93 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
13. The following is a statement of reasons for the indication of allowable subject matter:

Claim 11 recites a living hinge, among other features. Lew does not teach or suggest such a living hinge in any of its devices.

Claim 28 recites that a capacitor is also formed on the first shell. Lew also does not teach or suggest this feature.

Claim 61, 62, and 64 recites that the first enclosure portion means is rolled upon itself or around a motor. Lew does not teach or suggest this feature.

Claim 93 recites that the enclosure comprises a surface that is a fan-folded zigzag. Lew also does not teach or suggest this feature.

Claims 54, 66-70, and 72-75 each recite, among other features, that two conductive layers that support a battery are deposited on first and second surface areas of the same outer shell. Lew also does not teach or suggest this feature.

Claims 76 and 78 recite a pacemaker and a wristwatch, both of which are not taught or fairly suggested by Lew. U.S. Patent 5,695,885 to Malhi is also noted, which teaches a wristwatch having battery cells in the band. However, this reference also does fairly suggest the subject matter of claim 78 (the battery integral with the watch enclosure).

Conclusion


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached at (571) 272-1414. The phone number for the

Art Unit: 1746

organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonathan Crepeau
Primary Examiner
Art Unit 1746
December 13, 2004